

TOP SECRET

25X1

NRO REVIEW COMPLETED

9254-7-73

25X1

Copy 6 of 12

18 July 1973

MEMORANDUM FOR: Director, CIA Reconnaissance Programs

SUBJECT: Program Progress Report

Forwarded herewith are three copies of the IDEALIST
Program Progress Report for the period 1 April 1973 - 30 June 1973.

25X1

Brigadier General, USAF
Director of Special Activities

Attachments -

As stated [] (6442-73)

25X1

CLASSIFIED BY []
EXEMPT FROM GENERAL DECLASSIFICATION
SCHEDULE OF E.O. 11652, EXEMPTION CATEGORY:
§ 5B(1), (2), (3) or (4) (circle one or more)
AUTOMATICALLY DECLASSIFIED ON
Impossible to Determine
(unless impossible, insert date or event)

25X1

TOP SECRET

GROUP 1 EXCLUDED FROM
AUTOMATIC DOWNGRADING
AND DECLASSIFICATION

25X1

25X1

TOP SECRET

25X1

9254-7-73
Page 2

25X1

25X1

C/SAS/O/OSA: [REDACTED] (10 July 1973)

Distribution:

- 1 - D/CRP
- 2 - D/CRP
- 3 - D/CRP
- 4 - DDS&T Reg
- 5 - D/SA
- 6 - SAS/O/OSA
- 7 - D/O/OSA
- 8 - IDEA/O/OSA
- 9 - INTEL/O/OSA
- 10 - D/M/OSA
- 11 - AMS/OSA
- 12 - RB/OSA

25X1

TOP SECRET

EXCLUDED FROM
AUTOMATIC DOWNGRADING
AND DECLASSIFICATION

25X1

TOP SECRET

25X1

6442-73
Section 1

25X1

IDEALIST

OPERATIONAL SUMMARY AND STATUS

(1 April 1973 - 30 June 1973)

I. OPERATIONAL MISSION SUMMARY

Thirteen IDEALIST TACKLE operational missions were alerted during this period.

25X1

All missions were planned to be flown no closer than 25 nautical miles to the China mainland coast. The following is a summary of the missions flown:

25X1

2. Mission C143C was flown along the north central China coast. This mission was designed to collect photo information using the "H" configuration. The northern portion of the route was not flown due to unsuitable weather. The pilot reported 20 percent coverage of the planned southern flight lines prior to aborting the route for weather.

25X1

Thirty-seven of 135 programmed targets, two bonus COMIREX, and two non-COMIREX targets were photographed.

3. Mission C153C was planned along the central China coast from Quemoy north to Shanghai. This mission was flown utilizing the "H" configuration. Due to weather, the northern portion of the mission was not flown; however, the pilot diverted to the east and flew the southern portion of the

25X1

TOP SECRET

TOP SECRET

Approved For Release 2006/01/03 : CIA-RDP33-02415A000800030004-5

25X1

6442-73

25X1

Section 1

Page 2

mission. Seven of 120 programmed targets and two bonus non-COMIREX targets were photographed.

25X1

4. Mission C163C was flown around the Paracel Islands and along the coast of Hainan Island to photo information using the "H" configuration.

25X1

Eleven of 36 programmed targets plus one bonus non-COMIREX target were photographed.

25X1

5. Mission C183C, an "H" configured mission, was flown along the north central China coast. Only 30 percent coverage of the planned flight lines was obtained due to unsuitable weather along three portions of the route. Several (more than 10) fast moving ships heading east were sighted abeam Shanghai. Thirty-eight of 135 programmed targets were covered. Three bonus COMIREX and five non-COMIREX targets were photographed.

25X1

6. Mission C193C was flown in the vicinity of the Paracel Islands and Hainan Island, utilizing the "H" configuration. Detailed analysis of the mission revealed that 80 percent of the route was covered by clouds. Four of the 36 targets programmed were covered. Three bonus targets were covered; two COMIREX and one non-COMIREX.

25X1

25X1

Approved For Release 2006/01/03 : CIA-RDP33-02415A000800030004-5

TOP SECRET

GROUP 1 EXCLUDED FROM
AUTOMATIC DOWNGRADING
AND DECLASSIFICATION

25X1

TOP SECRET

25X1

6442-73
Section 1
Page 3

25X1

II. GENERAL

A. RED DOT - Six sorties were flown in support of continuing film tests using various film types and camera configurations.

25X1

D. B-3 Camera Test - Seven sorties were flown with the modified "B" configuration.

E. "H" Lens Test - Eleven sorties were flown to test the new color corrected lens.

F. - Four sorties were flown to provide photography in support of this test program.

G. COMPASS TRIP - Four sorties were flown over the Central Ferry Station poppy plantings. The Delta and multi-spectral configurations are being used for this phase.

H. - Three sorties were flown to photograph the areas flooded by the Mississippi River.

25X1

TOP SECRET

25X1

TOP SECRET

Approved For Release 2006/01/03 : CIA-RDP33-02415A000800030004-5

25X1

6442-73

25X1

Section 1

Page 4

25X1

III. PILOT AND AIRCRAFT STATUS (AS OF 30 JUNE 1973)

A. Detachment "G" (Edwards AFB - North Base)

Aircraft

2 U-2R

Pilots

25X1

B. Detachment "H"

Aircraft

Pilots

25X1

25X1

Approved For Release 2006/01/03 : CIA-RDP33-02415A000800030004-5

TOP SECRET

GROUP 1 EXCLUDED FROM
AUTOMATIC DOWNGRADING
AND DECLASSIFICATION

25X1

TOP SECRET

25X1

6442-73
Section 2

25X1

IDEALIST

DEVELOPMENT SUMMARY AND PROGRESS

(1 April 1973 - 30 June 1973)

I. AIRFRAME

A. Inspect and Repair as Necessary (IRAN) - A decision to extend the IRAN cycle from 2500 hours to 3400 hours was made on 3 May 1973. This decision was made in view of the favorable condition found on U.S. Air Force airframes previously submitted for IRAN.

B. J-75P13B Engine - The installation of improved third stage turbine blades to increase engine life expectancy has continued during this quarter as engines come due for overhaul. Two additional sets of improved first stage turbine blades have been procured and a three engine test program will commence during the first quarter of FY 1974. These improvements should permit extension of Hot Section Inspection (HSI) an additional 100 hours, and of Time Between Overhaul (TBO) an additional 200 hours.

C. U-2R Flight Test and Operational Training Summary

1. IDEALIST Program accomplishments in U-2R aircraft since introduction include 11,270.6 hours on 3476 sorties as of 30 June 1973.

2. Flight test and operational data are depicted below:

	<u>1 APR-30 JUN</u> <u>FLIGHTS</u>	<u>1 APR-30 JUN</u> <u>TIME</u>
1 - 051	42	110.5
2 - 053	44	102.4
3 - 054	53	204.3
4 - 055	47	171.7
TOTAL	186	588.9

TOP SECRET

EXCLUDED FROM
AUTOMATIC DOWNGRADING
AND DECLASSIFICATION

25X1

25X1

6442-73
Section 2
Page 2

25X1

II. PAYLOAD

A. "H" Configuration - Serial Number 002 reentered flight testing during this quarter; however, a secondary or "ghost" image was observable in high oblique angle testing. The mirror has been removed from the configuration and returned to the contractor's facility for further testing and analysis. At the end of this quarter, ultrasonic scanning of the mirror's brazed joints indicated separation had occurred in two areas. A math model indicated differential temperature gradients due to brazing separation and short term temperature changes could also be affecting test results.

B. "B" Configuration

1. Serial Number 229 experienced defocusing problems early in flight testing and was returned to the contractor's facility for solution. After duplication of in-flight problems in the altitude chamber, a plane of best off-axis focus was established and the unit reassembled with this plane aligned with the platen. Following further altitude chamber testing, the unit reentered the flight test program on 20 June 1973.

2. Serial Number 230 has completed all functional ground testing and altitude chamber testing and is scheduled to enter flight testing early in July 1973.

C. Delta Research Camera - The second f/3.5 apochromatic lens installation and variable slit modification to the scan heads of the Delta camera have been programmed to start during August 1973. The unit is scheduled to be in the modification process until January 1974.

25X1

25X1

TOP SECRET

25X1

6442-73

25X1

Section 2

Page 3

E. Q-E Bay Simulator - The Wright-Patterson Air Force Base simulator of Q-E Bay vibration, pressure, and temperature effects has been completed and will be operationally tested with an IRIS configuration during September 1973. Drawings necessary to construct hatches so that IDEALIST configurations can be tested in this simulator have been made available to the Wright-Patterson Project Office.

25X1



25X1

TOP SECRET

GROUP 1 - EXCLUDED FROM
AUTOMATIC DOWNGRADING
AND DECLASSIFICATION

25X1

TOP SECRET

Approved For Release 2006/01/03 : CIA-RDP33-02415A000800030004-5

25X1

6442-73

25X1

Section 2

Page 4

E. LORAN Navigation System - OSA arranged to borrow a LORAN navigation system [] for use in a 90 to 120 day test program designed to determine the applicability of this system in U-2R operations. Feasibility testing is planned to be completed by September 1973.

25X1



Approved For Release 2006/01/03 : CIA-RDP33-02415A000800030004-5

TOP SECRET

EXCLUDED FROM
AUTOMATIC DOWNGRADING
AND DECLASSIFICATION

25X1

TOP SECRET

Approved For Release 2006/01/03 : CIA-RDP33-02415A000800030004-5

25X1

6442-73
Section 2
Page 5

25X1

V. AERO MEDICAL AND LIFE SUPPORT ACTIVITIES

A. Medical Activities

1. AMS/OSA Medical Consultant -

recently chosen as consultant for AMS/OSA, visited Washington, D. C., for a briefing during mid-June.

25X1

2. Alcohol Study, Far East - It had been reported that "Mekong", the contained wood alcohol. Specimens were obtained along with "Gallion", the Chinese "white lightening" and "Wu-Jer-Pi", the other Gombai material. These were examined by the Air Force and the Technical Service Division laboratories and were found to be free of any harmful ingredients.

25X1

Approved For Release 2006/01/03 : CIA-RDP33-02415A000800030004-5

TOP SECRET

GROUP 1 - EXCLUDED FROM
AUTOMATIC DOWNGRADING
AND DECLASSIFICATION

25X1

TOP SECRET

25X1

6442-73
Section 2
Page 6

25X1

B. Life Support Activities

1. Shark Deterrent Screen - Contact has been made with Dr. C. Scott Johnson of the U.S. Navy, the inventor and principal investigator of a new shark deterrent device or as it is more commonly called, a shark bag. Dr. Johnson is forwarding one of the bags along with the early test results to Headquarters Life Support for evaluation. The major problem to date appears to be in miniturization packaging of this bag. In addition to its primary use in shark protection, the bag can also be used in overland survival as a sleeping bag, a water-collection device or for signaling.

2. Glove Bladder Improvement - The full pressure suit manufacturer, David Clark Company, is still investigating an improved bladder cloth for gloves. A weak area is evident in the stitching in the crotch of the fingers. Presently, in order to resolve this problem, a seamless glove has been fabricated using urethane as a part of the compound. Field evaluation should take place during the fall.

3. Helmet Bearing Seal Improvement - Six sets of redesigned seals are being field tested at Detachment "G". Initial results seem to indicate a considerable improvement, however, one seal did cause excessive abrasion to the mating teflon surface. The cause of this specific problem has yet to be identified.

4. S1010 Pilot Protective Assembly (PPA) Pressure Suit Fit Problem - It has become readily apparent in the past six months that the lower calf circumference must be increased for all subjects. Across the board enlargement in this area will be accomplished as pressure suits are returned to the factory for maintenance or rework.

5. Parachute Harness Retaining Strap - The RQ-225 parachute retainer strap that insures the proper position of the main riser has been causing some interference with the suit controller and vent hardware. The retainer is to be lengthened one inch and test jumps will be accomplished in August 1973.

TOP SECRET

EXCLUDED FROM
AUTOMATIC DOWNGRADING
AND DECLASSIFICATION

25X1

TOP SECRET

Approved For Release 2006/01/03 : CIA-RDP33-02415A000800030004-5

25X1

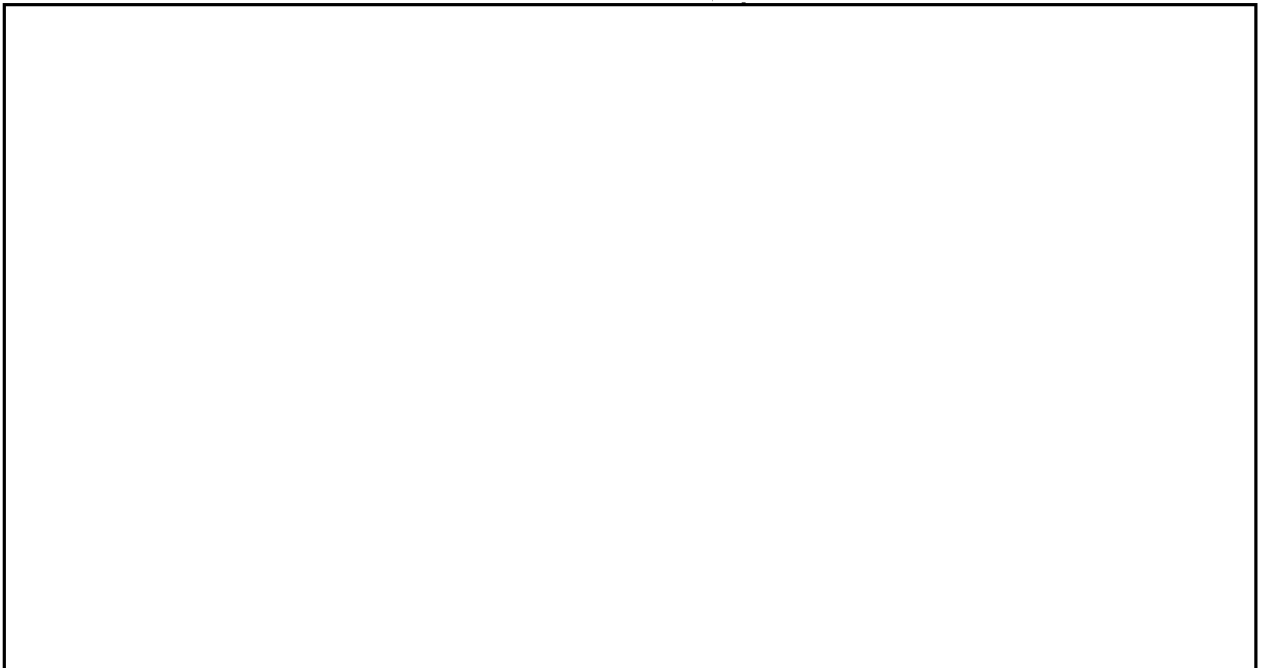
6442-73

25X1

Section 2

Page 7

6. Glove Disconnect - A full pressure suit glove disconnect has been redesigned to reduce weight and bulk, improve easy entry, and improve ventilation. Prototype hardware will be available in July 1973.



Approved For Release 2006/01/03 : CIA-RDP33-02415A000800030004-5

TOP SECRET

EXCLUDED FROM
AUTOMATIC DOWNGRADING
AND DECLASSIFICATION

25X1

Approved For Release 2006/01/03 : CIA-RDP33-02415A000800030004-5
25X1

Approved For Release 2006/01/03 : CIA-RDP33-02415A000800030004-5